

being incorporated by reference herein and copending with related application U.S.
application Serial No. 09/421,044, filed October 20, 1999.

IN THE CLAIMS:

Please cancel claims 21-25 and 27-37 without prejudice or disclaimer of the subject matter thereof.

Please cancel claims 38-51, which stand withdrawn from consideration, without prejudice or disclaimer of the subject matter thereof and without prejudice to the filing of a divisional application directed thereto.

Please add the following new claims:

--52. A plasma etching apparatus in which a processing gas is supplied inside of an etching chamber and a sample which is placed on a sample holder disposed inside of the etching chamber is processed by a plasma generated in the etching chamber, comprising:

a power source for supplying a high frequency wave to the sample holder;
the etching chamber being at least partially constituted by a sidewall which is grounded to earth;

a detachable member being detachably held against the sidewall inside of the etching chamber and forming an inner surface of the etching chamber which is in contact with the plasma generated in the etching chamber, the detachable member being removable from the sidewall to outside of the etching chamber; and

a thermally conductive medium being circulated inside of the detachable member so as to control temperature of the detachable member within a predetermined range;

wherein products formed in the etching chamber are deposited on the detachable member.

53. A plasma etching apparatus according to claim 52, wherein a temperature controller circulates the thermally conductive medium through the interior of the detachable member.

54. A plasma etching apparatus according to claim 52, wherein the thermally conducted medium is circulated inside of the detachable member so that the inner surface of the etching chamber is cooled.

55. A plasma etching apparatus according to claim 54, wherein the surface of the detachable member is controlled to a temperature lower than a temperature of the sample.

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wrt 56. A plasma etching apparatus according to claim 52, wherein the sidewall and the detachable member are formed of metal.

57. A plasma etching apparatus according to claim 52, wherein the products deposited on the detachable member include a film formed on the detachable member as the inner surface of the etching chamber.

58. A plasma etching apparatus according to claim 52, wherein the thermally conductive medium is a coolant.

59. A plasma etching apparatus according to claim 52, wherein the thermally conductive medium is circulated so as to control the temperature of the surface of the detachable member in a range of 0 to 50°C.